

BOLTON VALLEY WIND

Ricker Mountain, Bolton, Vermont



OVERVIEW

In 2009 the Ricker Mountain Wind Power Project received an \$82,700 grant from the Vermont Clean Energy Development Fund (CEDF) to test the feasibility of a small scale wind turbine farm at the summit of Ricker Mountain in Bolton, Vermont. Thanks to the assistance of the CEDF, Bolton Valley Ski Resort is now home to a 121' Northwind 100 Wind Turbine at its summit.

FEASIBILITY STUDY

With the assistance of wind consultants at Det Norske Veritas (DNV), a 180 foot meteorological tower was designed and constructed at the summit of Ricker Mountain to assess available wind resources. The tower included three levels of anemometers and wind vanes that provided an accurate understanding of wind speeds at various heights while also assessing wind shear. In addition, environmental studies were performed in order to determine the impact of a wind turbine farm on the surrounding land and species. These included a study of Bicknell's Thrush, a bird of high conservation priority in the Northeast, and a natural resource assessment to determine if the land was developable for a wind energy project. The grant awarded by the Clean Energy Development Fund provided about a quarter of the funding needed for these feasibility studies.

FINDINGS

The feasibility studies revealed that there were available wind resources at the summit of Ricker Mountain, the towers would not pose a safety hazard to Bicknell's Thrush and other species, and that portions of the site were developable because of favorable topographic conditions and the absence of significant natural resource constraints.

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COMPLETED PROJECT



Today, Bolton Valley is the 1st ski resort in Vermont and the 2nd in the nation to construct a wind turbine on site. Following the feasibility study, Bolton Valley owners Larry Williams and Doug Nedde constructed a 121' Northwind 100 Wind Turbine at its summit. It produces approximately 300,000 kilowatt hours of power annually and can start producing electricity at wind speeds as low as 6 mph. The wind turbine is currently set up for net metering with Bolton Valley Ski area.

